

LISTED BELOW ARE SOME HELPFUL TIPS TO CONSIDER WHEN OPERATING A SCHOLD HORIZONTAL MEDIA MILL.

1. MAKE SURE THE UNIT IS BOLTED TO THE FLOOR AND LEVEL. USE THE CHAMBER OD OR THE AGITATOR SHAFT AS THE LEVELING POINT.

2. WIRE UP ALL ELECTRICAL DEVICES IN ACCORDANCE WITH ALL EXISTING LOCAL AND FEDERAL CODES THAT APPLY AS PER THE WIRING DIAGRAM. NOTE: PRACTICE FEDERAL OSHA LOCKOUT AND TAG OUT PROCEDURES WHEN SERVICING THE UNIT FOR ANY REASON.

3. THE UNIT COMES COMPLETE WITH ELECTRICAL SAFETY SHUT-OFFS.

(A) LOW BARRIER FLUID SHUT OFF. THIS SHUTS OFF THE MAIN DRIVE MOTOR THROUGH THE CONTROL CIRCUIT IF THE FLUID LEVEL DROPS BELOW A PRE-DETERMINED LEVEL. WIRE IT NORMALLY, CLOSED. (HELD CLOSED WITH THE OIL LEVEL).

(B) LOW AIR PRESSURE SHUT OFF FOR BARRIER FLUID BOOST. THE SWITCH SHUTS OFF THE MAIN DRIVE MOTOR THROUGH THE CONTROL CIRCUIT IF THE PLANT AIR FALLS BELOW 20 TO 30 PSI. THIS SWITCH IS VARIABLE AND CAN BE SET VIA THE THIMBLE SIZED DIALS IN THE ASCO-ASHCROFT DIAPHRAGM SWITCH MOUNTED AT THE REAR OF THE UNIT. WIRE THIS SWITCH NORMALLY OPEN, HELD CLOSED BY PLANT AIR AND PROPERLY SET THIMBLE DIALS.

(C) HIGH PRESSURE SHUT OFF FOR EXCESSIVE CHAMBER (PRODUCT) PRESSURE. THIS SWITCH SHUTS OFF THE MAIN DRIVE MOTOR THROUGH THE CONTROL CIRCUIT WHEN THE INTERNAL CHAMBER PRESSURE PRODUCED BY THE FEED PUMP OF INCOMING PRODUCT/PREMIX IS TOO HIGH. THIS SWITCH IS VARIABLE AND CAN BE SET VIA THE THIMBLE SIZED DIALS IN THE ASCO-ASHCROFT DIAPHRAGM SWITCH MOUNTED AT THE REAR OF THE UNIT. SET THIS PRESSURE AT A MAXIMUM OF 40 PSI. WIRE THIS SWITCH NORMALLY CLOSED. IT WILL OPEN WHEN THE PRESSURE EXCEEDS 40 PSI.

(D) HIGH TEMPERATURE SHUT OFF FOR EXCESSIVE PRODUCT/PREMIX TEMPERATURE IN THE CHAMBER OR AT THE DISCHARGE PIPE. THIS SWITCH IS VARIABLE AND CAN BE SET VIA THE THIMBLE SIZED DIALS IN THE ASCO-ASHCROFT DIAPHRAGM SWITCH MOUNTED AT THE REAR OF THE UNIT. SET THIS TEMPERATURE AT ABOUT 20 TO 40 DEGREES F HIGH THAN YOUR

DESIRED TEMPERATURE MAXIMUM. WIRE THIS SWITCH NORMALLY CLOSED, IT WILL OPEN AT HIGH TEMPERATURE. NOTE: ALL PRODUCT/PREMIXES HAVE A MAXIMUM DESIRED TEMPERATURE THAT IS DETERMINED BY THE PIGMENT OR VEHICLE AND HOW IT IS FORMULATED. CONSULT YOUR LABORATORY FORMULATORS OR SUPERVISOR PRIOR TO DETERMINING THE SUITABLE SHUT-OFF TEMPERATURE.

4. BARRIER FLUID PNEUMATIC BOOST SHOULD BE SET VIA THE VARIABLE AIR REGULATOR MOUNTED TO THE RESERVOIR. SET THIS PRESSURE AT 20 PSI HIGHER THAN THE INCOMING PRODUCT/PREMIX PRESSURE PRODUCED BY THE FEED PUMP AND READ AT THE INLET PIPE GAUGE AT THE CONTROL PANEL GAUGE "FEED PRESSURE". USE 40 TO 50 PSI FOR A PRESET. NEVER RUN UNIT WITHOUT AIR.

5. BARRIER FLUID WILL LEAK OUT. IT LEAKS AT A SLOW RATE AND COULD EXCEED .25 CC'S PER HOUR. NEVER RUN THE RESERVOIR DRY. NEVER RUN THE UNIT WITHOUT BARRIER FLUID. SINCE ALL SEALS LEAK, MAKE SURE THE FLUID IS COMPATIBLE TO YOUR PRODUCT/PREMIX. SOME BARRIER FLUIDS ARE OIL (SUPPLIED FROM FACTORY) GLYCOL GLYCERINE, PLASTISOLS AND WATER SOLUBLE LUBRICANTS. DO NOT USE PLAIN WATER OR PLAIN SOLVENT.

6. COOLING WATER IS ESSENTIAL IN PROCESSING PIGMENT SLURRIES IN ALL MEDIA MILLS. SINCE MOST SCHOLD HORIZONTAL MILLS HAVE ZONED COOLING, EACH ZONE CAN BE SET TO ACCEPT A DIFFERENT VOLUME OF COOLING WATER. THE INCOMING AND OUTGOING WATER LINES ARE LOCATED AT THE REAR OF THE UNIT. THE OUTLETS ARE AT THE HIGHEST PORTION OF THE CHAMBER. BALL VALVES ARE LOCATED ON THE OUTLETS OF THE LINES AND PROVIDE "METER OUT" CONDITIONS FOR THE COOLING WATER. USE THE METER OUT BALL VALVES TO ADJUST YOUR COOLING WATER. IT USUALLY IS NOT NECESSARY TO RUN WITH THESE BALL VALVES WIDE OPEN. USUALLY THEY ARE HELD AT TO OPEN. HOWEVER, EACH PROCESS IS DIFFERENT.

7. WHEN STARTING YOUR UNIT IS IMPORTANT TO DETERMINE THE PUMP FLOW RATE AS IT RELATES TO EACH SLURRY. DISCONNECT THE FEED HOSE FROM THE MILL INLET PIPE AND PUT IT INTO A BUCKET, MEASURING BEAKER OR GRADUATED CONTAINER. THEN START UP THE PUMP AND LOG IN THE RATE OF PUMP OUTPUT AT EACH NUMBERED SETTING OF THE PUMP DRIVE AND NUMBERED HANDWHEEL. THIS LOG WILL HELP DETERMINE PUMP CONDITION FOR THE FUTURE AND HOW LONG TO RUN THE PUMP PRIOR TO STARTING A DRY MILL AT INITIAL START UP.



8. WHEN STARTING A DRY MILL/MEDIA BED, DO NOT START THE MILL AND THEN THE PUMP. IT WILL HARM THE MEDIA AND PRODUCE AGGRESSIVE WEAR TO ALL RELATED PARTS. AFTER YOU HAVE CALIBRATED THE PUMP (SEE LINE 7.), START THE PUMP FIRST AND JUDGE TO FULL CHAMBER, THEN START THE MILL. NEVER RUN THE MILL DRY OR CONVERSELY ALLOW PRODUCT/PREMIX TO RUN OUT OF DISCHARGE PIPE PRIOR TO STARTING THE MILL UNGROUND PRODUCT/PREMIX THAT RUNS OUT PRIOR TO THE MILL START UP WILL BE UNGROUND. IT COULD COLLECT IN TIME BEHIND THE SCREEN AND GAP SEAT AND CAUSE PLUGGING. IT ALSO CONTAMINATES THE DISCHARGE AREA, PIPES AND HOSES CAUSING A BAD GRIND READING DURING GRIND EVALUATION.

9. ONCE THE MILL HAS BEEN STARTED AFTER THE CHAMBER HAS BEEN TO FULL, COME COOLING WATER SHOULD BE TURNED ON. AT FIRST 1 TO 2 GPM TO ALLOW THE MILL TO COME UP TO TEMPERATURE. REFER TO LINE (6) FOR MAXIMUM PRODUCT/PREMIX TEMPERATURE. THEN ADD MORE COOLING WATER AS NEEDED VIA METER OUT BALL VALVES.

10. READJUST FEED OF PRODUCT/PREMIX AFTER GRIND QUALITY HAS BEEN DETERMINED ACCEPTABLE. ADJUST ADDITIONAL THROUGHPUT BY NUMBERS AS NOTED ON THE PUMP DRIVE HANDWHEEL. NOTE: THE CHAMBER MUST BE COMPLETELY PURGED OF PRODUCT THAT WAS PROCESSED AT A PREVIOUS PUMP RATE PRIOR TO DETERMINING THE GRIND QUALITY OF THE SUBSEQUENT PUMP SETTINGS. TO DETERMINE "TIME OF PURGE", REFER TO PUMP VOLUME LOG AS DONE FROM LINE U AGAINST THE VOLUME OF THE CHAMBER.

11. DO NOT OVERFEED THE UNIT. THE AMMETER AND CHAMBER PRESSURE GAUGE SHOULD BE MONITORED TO DETERMINE USUAL AND STANDARD OPERATING CONDITIONS. IF THE UNIT IS OVERFED THE AMPS AND PRESSURES WILL INCREASE THEN AN OVER HEATING CONDITION WILL OCCUR. AT THAT POINT IF ALL SAFETIES ARE OPERATIONAL THE UNIT SHOULD SHUT DOWN. IF NOT SHUT IT DOWN AFTER REDUCING THE PUMP FEED RATE TO THE PREVIOUS ACCEPTABLE SETTING. DO NOT REDUCE THE PUMP RATE WITH PUMP DRIVE OFF. IF UNIT IS SHUT DOWN FOR MORE THAN (2) MINUTES , SHUT OFF COOLING EATER OR PRODUCT AND MEDIA BED WILL SOLIDIFY OR BODY WILL INCREASE SIGNIFICANTLY.

12. WHEN SHUTTING THE UNIT OFF, AFTER BATCH IS FINISHED, DO NOT LEAVE CHAMBER FULL OF PRODUCT UNLESS ENTIRE MEDIA LOAD IS TO BE USED AT A LATER TIME WITH THAT PRODUCT WITHIN, BUT DUMPED AND SAVED. IF YOU WANT TO SAVE SEVERAL MEDIA BEDS WITH PRODUCT/PREMIX INCORPORATED, IT IS STELL WISE TO THIN OUT SO IT COULD BE RELOADED WITH EASE. IN MOST CASES A SOLVENT, WATER, RESIN OR VARNISH SLURRY SHOULD BE RUN THROUGH THE MILL BY POURING IT INTO THE CLEAN OUT/FLUSH OUT FUNNEL LOCATED ON TOP OF THE FEED PUMP THEN CLOSING THE BALL VALVE FROM THE PREMIX TANK AND OPENING THE BALL VALVE FROM THE CLEAN OUT/ FLUSH OUT FUNNEL.

13. WASH UP TROUGH IS PROVIDED AS AN INTEGRAL PART OF THE MILL FRAME. THE ENTIRE MEDIA BED CAN BE DUMPED INTO IT AND WASHED OUT WHILE CATCHING VALUABLE PRODUCT/PREMIX INTO A BUCKET, CONTAINER OR SCHOLD MEDIA DISCHARGE TRAY. ONCE THE PRODUCT/PREMIX OR WASH SLURRY HAS BEEN TAKEN AWAY, SAVED OR DISPOSED OF PROPERLY, THE RECEPTACLE OF CHOICE CAN BE BROUGHT BACK TO THE MILL FOR COLLECTION OF THE CLEAN, WASHED OUT MEDIA BED. AFTER PLACING THE RECEPTACLE UNDER THE LIP OF THE TROUGH PULL UP THE HEAVY DUTY SCREEN AND PUSH MEDIA INTO RECEPTACLE.

14. AFTER MILL IS CLEANED OUT OR MEDIA BED IS RINSED FOR SHUT DOWN, MAKE SURE ALL POWER IS DISCONNECTED, TAGGED OUT AND COOLING WATER IS OFF.

15. READ ALL SAFETY STICKERS AND PROCEDURES, OBTAIN TRAINING AND RE-EVALUATION FROM QUALIFIED ENGINEERS, TECHNICIANS OR SUPERVISORS. NEVER OPERATE THE MILL WITHOUT THE CHAMBER IN PLACE. NEVER EXCEED 35 PSIG IN THE COOLING JACKET. NEVER EXCEED 70 PSI IN BARRIER FLUID PRESSURE. NEVER EXCEED 50 PSI CHAMBER PRESSURE. NEVER EXCEED MAXIMUM ELECTRIC MOTOR FULL LOAD AMPS. NEVER MODIFY OR ALTER THE UNIT IN ANY WAY WITHOUT CONTACTING THE FACTOR IN WRITING AND WITHOUT WRITTEN GUIDELINES APPROVED FROM THE FACTORY.

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based on your application needs. Beyond installation, it is our commitment to provide unparalleled customer service. You can count on **Schold** for more than just reliable equipment, you can count on us to be a **trusted partner to your business**.

